



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,916	09/09/2003	Robert J. Rappold III	014208.1519 (70-01-012)	5111
35005	7590	09/08/2008	EXAMINER	
BAKER BOTTS L.L.P. 2001 ROSS AVENUE, 6TH FLOOR DALLAS, TX 75201-2980			CHAU, DUNG K	
			ART UNIT	PAPER NUMBER
			2169	
			NOTIFICATION DATE	DELIVERY MODE
			09/08/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail2@bakerbotts.com
PTOmail4@bakerbotts.com

Office Action Summary	Application No.	Applicant(s)	
	10/657,916	RAPPOLD, ROBERT J.	
	Examiner	Art Unit	
	DUNG K. CHAU	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 02 July 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-45 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-45 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

1. This Office Action is in response to applicant's communication filed July 02, 2008 in response to PTO Office Action mailed March 10, 2008. In response to the last Office Action, claims 1, 16 and 31 have been amended. As a result, claims 1-45 are pending in this application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/02/2008 has been entered.

Response to Amendment

3. The objections to claims 16-30 for lack of antecedent basis have been withdrawn due to persuasive arguments filed on July 02, 2008.

Response to Arguments

4. Applicant's arguments filed on July 02, 2008 in response to the office action mailed on March 10, 2008 have been fully considered but are deemed to be moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-45** are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Ivanov Pub. No. US 2004/0215604 in view of Britton et al. Patent No. US 6,279,030.

As per **claim1**, Ivanov teaches the invention substantially as claimed, including a method for providing an extensible agent comprising:

receiving a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determining one or more environment characteristics as if the target data source 306, 308 is the WCS data source 306, the data source adapter 326 uses data source adapters of the WCS for establishing a connection and querying the WCS data source 306. If the target data source 306, 308 is the local data source 308, connections details for the data source 306, 308 are provided by the query command 314 to the data source adapter 326, for establishing the required connection and querying the data source 306, 308 (Fig. 3; page 4, paragraphs [0042, 0046]);

However, Ivanov does not explicitly teach

- a) dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing; and
- b) processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and scheduled.

Britton et al. teach

- a) **dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing** as dynamically selecting a program component based upon a user's authorization privileges, current working environment, preferences, network connection type, status, current values of changeable attributes or some combination thereof. The values of changeable attributes may be provided from a plurality of sources, including the user, configuration mechanisms on the user's machine, the network gateway, or a network database of user or group preferences and administrative policy information (col. 3, lines 40-60).

b) processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and scheduled as software-implemented technique is also provided for use in a computing environment capable of having a connection to a network, for dynamically selecting a program component for remote execution based on current values of changeable attributes (col. 4, line 43 - col. 5 line 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Ivanov and Britton et al. to dynamically select a program component and process the selected program component based on user request, because it would allow software be optimized for particular users or groups of users, or particular environments of hardware and/or software, while still providing applications that are usable by a wide range of users in a wide range of operating environments.

As per **claim 2**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 3**, Ivanov further teaches **instantiating the selected agent component objects** (page 3, paragraphs [0035-0036]).

As per **claim 4**, Ivanov further teaches the method of Claim 1 further comprising:

selecting one or more characteristics of the request (page 4, paragraphs [0045-0047]); and

wherein dynamically selecting at least a portion of a plurality of agent components based on the client request comprises **selecting at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 5**, Ivanov further teaches **storing the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 6**, Ivanov further teaches **one of the selected agent components comprising embedded structured query language (SQL) operable to query a database** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 7**, Ivanov further teaches the **client comprising a remote client and the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like (page 2, paragraph [0024]).

As per **claim 8**, Ivanov further teaches **communicating a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 9**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging logic and component locating logic** as XML, DataBean (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 10**, Ivanov further teaches wherein **at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 11**, Ivanov further teaches **registering each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 12**, Ivanov further teaches wherein dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises:

automatically retrieving variable properties from a knowledgebase using the client request and the environment variables (page 1, paragraph [0008]); and
selecting at least a portion of the plurality of agent components based on the retrieved variable properties (page 4, paragraph [0044]).

As per **claim 13**, Ivanov further teaches wherein dynamically selecting at least a portion of the plurality of agent components based on the client request and the environment characteristics comprises **selecting at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [00054-55]).

As per **claim 14**, Ivanov further teaches **the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment** as local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 15**, Ivanov further teaches the method of Claim 1 further comprising:

migrating the plurality of agent components to an environment prior to receiving the request from the client (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein processing the client request using the selected agent components comprises automatically processing the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037]).

As per **claim 16**, Ivanov teaches the invention substantially as claimed, including Software for providing an extensible agent, the software being embodied in a computer-readable medium and when executed operable to:

receiving a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determining one or more environment characteristics as if the target data source 306, 308 is the WCS data source 306, the data source adapter 326 uses data source adapters of the WCS for establishing a connection and querying the WCS data source 306. If the target data source 306, 308 is the local data source 308, connections details for the data source 306, 308 are provided by the query command 314 to the data source adapter 326, for establishing the required connection and querying the data source 306, 308 (Fig. 3; page 4, paragraphs [0042, 0046]);

However, Ivanov does not explicitly teach

- a) dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing; and
- b) processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and scheduled.

Britton et al. teach

- a) **dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing** as dynamically selecting a program component based upon a user's authorization privileges, current working environment, preferences, network connection type, status, current values of changeable attributes or some combination thereof. The values of changeable attributes may be provided from a plurality of sources, including the user, configuration mechanisms on the user's machine, the network gateway, or a network database of user or group preferences and administrative policy information (col. 3, lines 40-60).
- b) **processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and**

scheduled as software-implemented technique is also provided for use in a computing environment capable of having a connection to a network, for dynamically selecting a program component for remote execution based on current values of changeable attributes (col. 4, line 43 - col. 5 line 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Ivanov and Britton et al. to dynamically select a program component and process the selected program component based on user request, because it would allow software be optimized for particular users or groups of users, or particular environments of hardware and/or software, while still providing applications that are usable by a wide range of users in a wide range of operating environments.

As per **claim 17**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 18**, Ivanov further teaches **operable to instantiating the selected agent component objects** (page 3, paragraphs [0035-0036]).

As per **claim 19**, Ivanov further teaches operable to

select one or more characteristics of the request (page 4, paragraphs [0045-0047]); and

wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request comprises **the software operable to select at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 20**, Ivanov further teaches **operable to store the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 21**, Ivanov further teaches **one of the selected agent components comprising embedded structured query language (SQL) operable to query a database** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 22**, Ivanov further teaches **the client comprising a remote client and wherein the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like (page 2, paragraph [0024]).

As per **claim 23**, Ivanov further teaches **operable to communicate a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 24**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging and component location logic as XML, DataBean** (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 25**, Ivanov further teaches **wherein at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 26**, Ivanov further teaches **operable to register each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 27**, Ivanov further teaches wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises the software operable to:

retrieve variable properties from a knowledgebase using the client request and the environment variables (page 1, paragraph [0008]); and
select at least a portion of the plurality of agent components based on the retrieved variable properties (page 4, paragraph [0044]).

As per **claim 28**, Ivanov further teaches wherein the software operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprises **the software operable to select at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [000054-55]).

As per **claim 29**, Ivanov further teaches the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment as local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 30**, Ivanov further teaches the software of Claim 16 further operable to:

migrate the plurality of agent components to an environment prior to receiving the request from the client (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein the software operable to process the client request using the selected agent components comprises the software operable to automatically process the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037]).

As per **claim 31**, Ivanov teaches the invention substantially as claimed, including a server comprising:

a memory operable to store a database and a knowledgebase, the knowledgebase comprising a plurality of component selection patterns (page 2, paragraph [0027-0031]); and

one or more processors collectively operable to:

receiving a request from a client as a query processor that receives a query command from a caller in an application (Abstract; page 1, paragraph [0014]; page 4, paragraph [0045]);

determining one or more environment characteristics as if the target data source 306, 308 is the WCS data source 306, the data source adapter 326 uses data source adapters of the WCS for establishing a connection and querying the WCS data source 306. If the target data source 306, 308 is the local data source 308, connections details for the data source 306, 308 are provided by the query command 314 to the data source adapter 326, for establishing the required connection and querying the data source 306, 308 (Fig. 3; page 4, paragraphs [0042, 0046]);

However, Ivanov does not explicitly teach

- a) dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing; and
- b) processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and scheduled.

Britton et al. teach

a) **dynamically selecting at least a portion of a plurality of agent components based on the client request and the environment characteristics, the at least a portion of the plurality of agent components being selected using a relational knowledgebase that comprises a properties table of properties for dynamic agent component selection and an actions table of actions for processing** as dynamically selecting a program component based upon a user's authorization privileges, current working environment, preferences, network connection type, status, current values of changeable attributes or some combination thereof. The values of changeable attributes may be provided from a plurality of sources, including the user, configuration mechanisms on the user's machine, the network gateway, or a network database of user or group preferences and administrative policy information (col. 3, lines 40-60).

b) **processing the client request using the selected agent components and according to one or more actions of the actions table that are planned and**

scheduled as software-implemented technique is also provided for use in a computing environment capable of having a connection to a network, for dynamically selecting a program component for remote execution based on current values of changeable attributes (col. 4, line 43 - col. 5 line 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Ivanov and Britton et al. to dynamically select a program component and process the selected program component based on user request, because it would allow software be optimized for particular users or groups of users, or particular environments of hardware and/or software, while still providing applications that are usable by a wide range of users in a wide range of operating environments.

As per **claim 32**, Ivanov further teaches **each agent component comprising an object defined in an object-oriented programming language** as Object Oriented Software (page 3, paragraph [0037]).

As per **claim 33**, Ivanov further teaches the processors further operable to instantiate the selected agent component objects (page 3, paragraphs [0035-0036]).

As per **claim 34**, Ivanov further teaches the processors further operable to **select one or more characteristics of the request** (page 4, paragraphs [0045-0047]) and

wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request comprise **the processors operable to select at least a portion of agent components based on the selected request characteristics** (page 4, paragraph [0047]).

As per **claim 35**, Ivanov further teaches the processors further **operable to store the selected request characteristics in one of the selected agent components** (page 5, paragraph [0055]).

As per **claim 36**, Ivanov further teaches wherein **accessing data in the database using the selected agent components is performed by one of the selected agent components comprising embedded structured query language (SQL)** (page 1, paragraph [0015]; page 5, paragraph [0055]).

As per **claim 37**, Ivanov further teaches **the client comprising a remote client and wherein the client request is received through a web server** as each of the clients 106 communicates with the server 102 via the network 104. The network 104 may be embodied using one or more conventional networking technologies, including local area networks, wide area networks, intranets, public Internet, and the like (page 2, paragraph [0024]).

As per **claim 38**, Ivanov further teaches the processors further **operable to communicate a web-enabled message to the remote client based on the processed request** (page 2, paragraphs [0024-0026]; page 3, paragraph [0033]).

As per **claim 39**, Ivanov further teaches **at least a portion of the agent components comprising objects based on a common parent class, the common parent class comprising component messaging and component location logic** as XML, DataBean (pages 3-4, paragraphs [0041-0043]; page 5, paragraph [0055]).

As per **claim 40**, Ivanov further teaches **wherein at least a portion of the plurality of agent components comply with Foundation for Intelligent Physical Agents (FIPA) standards** as DataBean, and data access objects (DAOs) (page 3; paragraph [0041]; page 4, paragraph [0044]).

As per **claim 41**, Ivanov further teaches **the processors further operable to register each instantiated agent component object** (page 3, paragraphs [0034, 0037]).

As per **claim 42**, Ivanov further teaches wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprise the processors operable to:

retrieve variable properties from the knowledgebase using the client request and the environment variables (page 1, paragraph [0008]);
selecting one of the component selection patterns based on the retrieved variable properties (page 4, paragraph [0044]); and
select at least a portion of the plurality of agent components using the component selection pattern (page 3, paragraph [0037]).

As per **claim 43**, Ivanov further teaches wherein the processors operable to dynamically select at least a portion of a plurality of agent components based on the client request and the environment characteristics comprise **the processors operable to select at least a portion of the plurality of agent components based on a JAVA properties file** (page 5, paragraphs [000054-55]).

As per **claim 44**, Ivanov further teaches **the selected portion of the plurality of agent components operable to be executed in a non-web-enabled environment and a web-enabled environment as** local area networks, intranets, and internet (page 2, paragraphs [0024-0026]).

As per **claim 45**, Ivanov further teaches the processors further operable to: **migrate the plurality of agent components to an environment prior to receiving the request from the client** (page 1, paragraph [0013]; page 2, paragraph [0027]; page 3, paragraph [0032]); and

wherein the processors operable to process the client request using the selected agent components comprises the software operable to automatically process the client request using the selected agent components (page 1, paragraph [0014]; page 3, paragraph [0037]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Documents:

US 6330710 B1 O'Neil; Joseph Thomas et al.

US 7373350 B1 Arone; Geoffrey et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung K. Chau whose telephone number is 571-270-1754. The examiner can normally be reached on Mon - Friday 7:30am - 5:00pm Est, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on 571-272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dung K Chau/
Examiner, Art Unit 2169
August 29, 2008

/KP/

/Apu M Mofiz/
Supervisory Patent Examiner, Art Unit 2161